

Index of Distal Remediation Groups/Sites  
Source Material Operable Unit 4  
Tar Creek Superfund Site, Ottawa County, Oklahoma  
Updated July 5, 2017

Remediation Group/Site	Distal Zone	Includes Restricted Chat	Status	Acres Reclaimed	Property Acres	Waste Remediated (Tons)	Total Waste to Chat Processor (Tons)	Total Source Material to CMFTP Repository (Tons)	Total Waste to Hockerville (Tons)	Total Waste to Other Locations (Tons)	Total Woody Debris to CMFTP Repository (Tons)	Other Waste - Location	Chat Piles	Chat Bases	Fine Tailings	Capped Mine Shafts	Cased Borings Plugged	Will Require ICs	Comments
RS2332-14	NE Distal Zone	No	Construction completed	0.39		2,700							None	None	None	0	0	No	
RS2318-16	NE Distal Zone	No	Construction completed	0.61		635							None	None	None	0	0	No	
RS2431-22	NE Distal Zone	No	Construction completed	0.71		221							None	None	None	0	0	No	
Distal 1 North	SE Distal Zone	No	Construction completed	36	62	189,288	20,252	169,036					CP092, CP093, CP094	CB230 CB232 CB233 CB234 CB235 CB236	None	6	0	No	3 short casings removing, not plugged
Distal 1 South	SE Distal Zone	No	Construction completed	8.2	80	43,162	10,401	26,700		6,061		3,042 to CB223 subsidence; 3,019 to onsite mine shafts	CP099, CP100, CP104	CB239	None	5	7	No	CP104 started under Distal 1 South, but completed under Distal 6. 1 cased boring left as ODEQ monitoring well
Distal 2	NE Distal Zone	No	Construction completed	137.7	204	548,439	23,328	497,678	4,435	22,998		20,583 to CB223 subsidence; 2,415 to fill mine shafts	None	CB044, CB044-S1, CB046, CB046-S1, CB046-S2, CB046-S3, CB046-S4, CB046-S5, CB046-S6, CB046-S7, CB046-S8, CB048, CB048-S1, CB048-S2, CB048-S3, CB049, CB053, CB053-S1, CB053-S2, CB053-S3, CB053-S4, CB053-S5	None	19	23	No	
Distal 3	SE Distal Zone	No	Construction completed	70	415	301,058	14,613	265,162		21,283		21,283 to CB223 subsidence	CP088, CP088-S1, CP088-S2, CP088-S3	CB214, CB215, CB216, CB217, CB219, CB220, CB221, CB221-S1, CB221-S2, CB222	None	20	15	No	Remediation partially complete at CB214 and CB217 (above 810 feet amsl only) and CB215 (up to 50-foot buffer zone outside Beaver Creek stream bank. Remediation not performed at CB220 (will create mine discharge). 2 cased borings left as ODEQ monitoring wells
CB223 Subsidence	NE Distal Zone	No	Construction completed	23.6	48	112,280				112,280		All material consolidated onsite in subsidence	None	CB223	None	7	15	Yes, for two properties (filled subsidences), and potentially for area of remaining soil that exceeds remedial goals	Following material brought from offsite and consolidated: Development rock: 8044 tons; Chat: 28,901 tons; Fine tailings: 7,964 tons Some areas of soil exceeding remedial goals remain; periodic monitoring and consideration of soil amendments recommended; 6 shafts capped, 1 backfilled; 1 cased boring left as ODEQ monitoring well
Smelter Site	NE Distal Zone	No	Construction completed	28.8	28.8	22,283		22,283					None	None	None	0	0	No	
CB143-CB146-CB147 Area	NE Distal Zone	No	Construction completed	47.3	80	124,065		21,944		102,121		40,977 used onsite as fill; 60,936 consolidated onsite; 208 to Cherryval, KS (diesel-impacted soil)	None	CB143, CB146, CB147, CB150	None	10	3	Yes (one consolidation area; two filled subsidences)	

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Distal 4	SE Distal Zone	No	In progress	72	404	388,652	170,008	112,119		106,525		104,000 consolidated onsite at CP091; 2,525 in mine shafts	CP091, CP093-S1, CP093-S2, CP093-S3, CP093-S4, CP093-S5, CP094-S1	CB231	FT063	13	10	Yes, for CP091 property (consolidation area)	Note: one owner has rescinded access; site restoration for two properties completed by owners.
Distal 5	SE Distal Zone	No	Construction completed	21.5	160	154,617	29,716	123,864		1,037		1,037 in onsite mine shafts	CP058, CP059	CB156, CB157	None	4	9	No	
Distal 6	SE Distal Zone	No	Construction completed	19.3	240	89,371	2,995	68,793		17,583	1,718	14,983 in CB011 open pit mine; 2,600 in onsite mine shafts	CP098, CP098-S1, CP104	CB011N, CB237	None	9	6	No	CB237/CP098: Prefinal inspection with EPA/ODEQ performed 12/4/12 (CB011N) and 12/5/12 (CB237/CP098) with no items noted. Need to address partial mineshaft collapse that has occurred since prefinal at CB237/CP098.
Distal 6a	SE Distal Zone	No	Source Material Removal Completed; Currently conducting Soil Amendment Long Term Performance Measures; RAR submitted to EPA 9-21-16	20	20	83,839		1,554	82,285					CB011N	None	4	0	No	Performed under ODEQ/Quapaw Tribe Inter-Agency Agreement
Beaver Creek Unrestricted Tier 1 Project	SE Distal Zone	No	In progress. CB008/CB213 in STPM; CP094-S2/CP097-S1/CB011-S1 final; CP216-S1/CB087 in progress	To be determined	To be determined	108,114		103,667.21		4,446.4		Filled onsite mine shafts	CP097-S1, CP087	CB213, CB008, CB011-S1, CB218, CB216-S1	None	8	TBD	Yes	Being performed under ODEQ/Quapaw Tribe Inter-Agency Agreement. CB008 and CB213 final inspection conducted 12-21-2016.
Distal 7 North	SE Distal Zone	Yes (920 1)	Construction completed	52.8	200	212,018	31,074	177,932		3,012	1,289	2,934 to mine shafts; 78 concrete debris to Distal 3 mine shafts	CP101, CP102, CP103, CP105	CB241, CB241-S1, CB241-S2, CB242, CB243	None	30	25	Only if determined by EPA to be necessary based on remaining TZ soil exceedances	Some soil left onsite after remediation exceeds RGS. The recommended approach is periodic monitoring and consideration of future addition of soil amendments.
Distal 7 North (Drainage Feature)	SE Distal Zone	No	Construction completed	3	3	3,515		3,515					CP101	CB242	None	0	0	No	Performed under EPA/Quapaw Tribe Cooperative Agreement. Final inspection completed on 08/04/2016. RAR approved 9-23-16.
Distal 7 South	SE Distal Zone	Yes (920 S 24, 920 S 94A, 920 S 94B)	Construction completed	14.4	200	64,328	7,400	41,888		15,040	3,308	13 to onsite mine shafts; 15027 to CB240-SUB-A	CP095, CP096, CP097	CB238, CB240	None	4	2	Yes (CB240-SUB-A and CB238 barn area)	
Distal 8	SE Distal Zone	Yes (920 T2001)	Construction Completed; Currently conducting Soil Amendment Long Term Performance Measures	15	40	107,310		107,310					None	CB011	None	3	4	No	Performed under EPA/Quapaw Tribe Cooperative Agreement. RAR approved 8-15-16.
Distal 9	NE Distal Zone	Yes (920 87)	In preparation	To be determined	To be determined	To be determined							None	CB041, CB042	None	TBD	TBD	TBD	CB008 and CB213 originally included have been moved to Beaver Creek Unrestricted Tier 1 project
Distal 10	Elm Creek Distal Zone	Yes (920 163)	In progress	To be determined	200	100,714		100,714					None	CB017, CB018 (portion), CB019, CB020	None	1	TBD	TBD	Work in progress
Distal 10a - CB019	Elm Creek Distal Zone		In preparation	To be determined	To be determined	To be determined								CB019		TBD	TBD	TBD	Quapaw Tribe working on budget and workplan for this site.
Beaver Creek North	SE Distal Zone	Yes (920 S 14)	Construction completed	20	20	60,193	26,513	12,514	21,166				CP060	None	None	1	0	No	Performed under EPA/Quapaw Tribe Cooperative Agreement. RAR approved 9-22-16.
Distal 11 (going to Hockerville Subsidence)	NE Distal Zone	No	DEFERRED - NOT RESTRICTED	To be determined	To be determined	To be determined							CP054	CB140 (edge), CB224, CB228	None				Deferred because not restricted. Includes the edge of CB140 or associated remaining TZ soil that may be present on the CP054 property
Hockerville Subsidence	NE Distal Zone	No	DEFERRED - NOT RESTRICTED	To be determined	To be determined	To be determined							None	None	None				Deferred because not restricted

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Distal 12	Elm Creek Distal Zone	Yes (920 152)	In progress	To be determined	120	0							None	CB092, CB095, CB095-S1, CB096, CB096-S1	FT024, FT025	TBD	TBD	TBD	CB092/CB096-S1/CB095-S1 are cleared and grubbed. CB095/CB096 under migratory bird hold until 9-1-2017.
Distal 13	Elm Creek Distal Zone	Yes (920 156, 920 157)	In progress	To be determined	400	703,081.80	68,097.95	634,983.85					CP008, CP009	CB026, CB027, CB028, CB030, CB031	FT006, FT007	7	5	No	CB028 final; CP009 in STPM; work in progress on CB027, CP008, and CB028-S1
Bird Dog	Elm Creek Distal Zone	Yes	In preparation	To be determined	To be determined	To be determined							CP004	CB013, CB014	FT001, FT008				Waiting on final RD from CH2M
Elm Creek Unrestricted	Elm Creek Distal Zone	No	In preparation	To be determined	To be determined	To be determined							CP007	CB018, CB022, CB023, CB024, CB025, CB029	FT004, FT005	TBD	TBD	TBD	ODEQ waiting on EPA approval of workplan and budget
CB199	Elm Creek Distal Zone	Yes	In preparation	To be determined	To be determined	To be determined													Working on chat volume estimate

<b>TOTAL</b>	<b>591.31</b>	<b>2,924.80</b>	<b>3,419,883</b>	<b>404,398</b>	<b>2,491,657</b>	<b>107,886</b>	<b>412,386</b>	<b>6,315</b>							<b>151</b>	<b>124</b>			
						12%	73%	3%	12%	0%									